

**BOBBY JINDAL**  
GOVERNOR



**HAROLD LEGGETT, Ph.D.**  
SECRETARY

**State of Louisiana**  
**DEPARTMENT OF ENVIRONMENTAL QUALITY**  
**ENVIRONMENTAL SERVICES**

Certified Mail No.:

Agency Interest No. 119267  
Activity No.: PER20080007

Mr. Joey Mahmoud  
Sabine Pass LNG, LP  
700 Milam Street, Suite 500  
Houston, Texas 77002

RE: Prevention of Significant Deterioration (PSD) permit, Sabine Pass LNG Terminal, Sabine Pass LNG, LP, Johnsons Bayou, Cameron Parish, Louisiana

Dear Mr. Mahmoud:

Enclosed is the PSD permit modification for the facility. Should you have any questions concerning the permit, contact Dan Nguyen at 225-219-3118.

Sincerely,

Cheryl Sonnier Nolan  
Assistant Secretary

\_\_\_\_\_  
Date

CSN: DCN

c: US EPA Region 6

**PSD-LA-703(M2)  
AI No. 119267**

**AUTHORIZATION TO CONSTRUCT AND OPERATE A NEW OR MODIFIED  
FACILITY PURSUANT TO THE PREVENTION OF SIGNIFICANT DETERIORATION  
REGULATIONS IN LOUISIANA ENVIRONMENTAL REGULATORY CODE,  
LAC 33:III.509**

In accordance with the provisions of the Louisiana Environmental Regulatory Code, LAC 33:III.509,

Sabine Pass LNG, LP  
700 Milam Street, Suite 500  
Houston, Texas 77002

is authorized to operate the Sabine Pass LNG Terminal at

9243 Gulf Beach Road  
Johnsons Bayou, Louisiana 70631

subject to the emissions limitations, monitoring requirements and other conditions set forth hereinafter.

Signed this \_\_\_\_\_ day of \_\_\_\_\_, 2009.

Cheryl Sonnier Nolan  
Assistant Secretary  
Office of Environmental Services

**PUBLIC NOTICE**  
**LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY (LDEQ)**  
**SABINE PASS LNG, LP**  
**SABINE PASS LNG TERMINAL**  
**PROPOSED PART 70 AIR OPERATING AND PSD PERMITS MODIFICATIONS**

The LDEQ, Office of Environmental Services, is accepting written comments on the Proposed Part 70 Air Operating and PSD Permits Modifications for Sabine Pass LNG, LP, 700 Milam Street, Suite 500, Houston, Texas 77002 for the Sabine Pass LNG Terminal. **The facility is located at 9243 Gulf Beach Road, Johnsons Bayou, Cameron Parish.**

Sabine Pass LNG, LP requested a permit modification to (1) remove two permitted but never constructed standby diesel-fired firewater pump booster engines, (2) construct and operate a fuel dispensing facility, (3) incorporate applicable 40 CFR 60 Subpart IIII requirements for the two permitted standby diesel-fired generator engines, (4) revise the 40 CFR 60 Subpart KKKK requirements to clarify compliance regulations for sulfur monitoring, (5) incorporate BACT for NOX and CO emissions from the turbines at low load operations, (6) make minor changes in order to streamline the permit requirements, and (7) change the facility name from Sabine Pass LNG Import Terminal to Sabine Pass LNG Terminal. There are no proposed physical changes at the terminal.

Emissions from the project in tons per year are as follows:

Pollutant	Permitted	Proposed	Change
PM	51.87	51.79	- 0.08
PM <sub>10</sub>	51.87	51.79	- 0.08
SO <sub>2</sub>	5.45	5.40	- 0.05
NO <sub>x</sub>	924.70	922.91	- 1.79
CO	1057.14	1057.04	- 0.10
VOC	58.22	58.70	+ 0.48

A technical review of the working draft of the proposed permit was submitted to the facility representative and the LDEQ Surveillance Division. Any remarks received during the technical review will be addressed in the "Worksheet for Technical Review of Working Draft of Proposed Permit". All remarks received by LDEQ are included in the record that is available for public review.

Written comments, written requests for a public hearing or written requests for notification of the final decision regarding this permit action may be submitted to Ms. Soumaya Ghosn at LDEQ, Public Participation Group, P.O. Box 4313, Baton Rouge, LA 70821-4313. **Written comments and/or written requests must be received by 12:30 p.m., Monday, May 11, 2009.** Written comments will be considered prior to a final permit decision.

If LDEQ finds a significant degree of public interest, a public hearing will be held. LDEQ will send notification of the final permit decision to the applicant and to each person who has submitted written comments or a written request for notification of the final decision.

The permit application and the proposed permits are available for review at the LDEQ, Public Records Center, Room 127, 602 North 5<sup>th</sup> Street, Baton Rouge, LA. Viewing hours are from 8:00 a.m. to 4:30 p.m., Monday through Friday (except holidays). **The available information can also be accessed electronically on the**

**Electronic Document Management System (EDMS) on the DEQ public website at [www.deq.louisiana.gov](http://www.deq.louisiana.gov).**

Additional copies may be reviewed at the Cameron Parish Library, Johnson Bayou Library Bookmobile, presently located at 983 Main St., Hackberry, LA 70645.

Inquiries or requests for additional information regarding this permit action should be directed to Dan Nguyen, LDEQ, Air Permits Division, P.O. Box 4313, Baton Rouge, LA 70821-4313, phone (225) 219-3118.

Persons wishing to be included on the LDEQ permit public notice mailing list or for other public participation related questions should contact the Public Participation Group in writing at LDEQ, P.O. Box 4313, Baton Rouge, LA 70821-4313, by email at [deqmaillistrequest@la.gov](mailto:deqmaillistrequest@la.gov) or contact the LDEQ Customer Service Center at (225) 219-LDEQ (219-5337).

**Permit public notices including electronic access to the proposed permits and statement of basis can be viewed at the LDEQ permits public notice webpage at [www.deq.louisiana.gov/apps/pubNotice/default.asp](http://www.deq.louisiana.gov/apps/pubNotice/default.asp) and general information related to the public participation in permitting activities can be viewed at [www.deq.louisiana.gov/portal/tabid/2198/Default.aspx](http://www.deq.louisiana.gov/portal/tabid/2198/Default.aspx).**

Alternatively, individuals may elect to receive the permit public notices via email by subscribing to the LDEQ permits public notice List Server at [http://www.doe.louisiana.gov/oes/listservpage/ldeq\\_pn\\_listserv.htm](http://www.doe.louisiana.gov/oes/listservpage/ldeq_pn_listserv.htm).

**All correspondence should specify AI Number 119267, Permit Numbers 0560-00214-V2 and PSD-LA-703(M2), and Activity Numbers PER20080006 and PER20080007.**

**Scheduled Publication Dates:**

**Thursday, April 2, 2009 in The Cameron Parish Pilot (Cameron) &**

**Friday, April 3, 2009 in The Advocate (Baton Rouge)**

## BRIEFING SHEET

### SABINE PASS LNG TERMINAL AGENCY INTEREST NO. 119267 SABINE PASS LNG, LP JOHNSONS BAYOU, CAMERON PARISH, LOUISIANA PSD-LA-703(M2)

#### **PURPOSE**

To obtain a PSD permit modification for the Sabine Pass LNG Terminal.

#### **RECOMMENDATION**

Approval of the proposed permit modification.

#### **REVIEWING AGENCY**

Louisiana Department of Environmental Quality, Office of Environmental Services, Air Permits Division

#### **PROJECT DESCRIPTION**

The Sabine Pass LNG Terminal imports, stores, and vaporizes liquefied natural gas (LNG) for the U.S. natural gas markets. The facility is able to vaporize four billion standard cubic feet per day of LNG.

Sabine Pass LNG, LP requests a permit modification to 1) remove two permitted but never constructed standby diesel-fired firewater pump booster engines, 2) incorporate BACT for NO<sub>x</sub> and CO emissions from the turbines at low load operations and for VOC fugitive emissions, and 3) change the facility name from Sabine Pass LNG Import Terminal to Sabine Pass LNG Terminal. There are no proposed physical changes at the terminal. Permitted emissions in tons per year will be as follows:

Pollutant	Permitted	Proposed	Change
PM	51.87	51.79	- 0.08
PM <sub>10</sub>	51.87	51.79	- 0.08
SO <sub>2</sub>	5.45	5.40	- 0.05
NO <sub>x</sub>	924.70	922.91	- 1.79
CO	1057.14	1057.04	- 0.10
VOC	58.22	58.70	+ 0.48

#### **TYPE OF REVIEW**

PM, PM<sub>10</sub>, NO<sub>x</sub>, CO, and VOC emissions from the facility were reviewed under the PSD regulations and documented in Permit PSD-LA-703 and PSD-LA-703(M1). This permit (PSD-LA-703(M2)) includes PSD requirements for all equipment at the facility, including BACT for NO<sub>x</sub> and CO emissions from the turbines at low loads.

## BRIEFING SHEET

### SABINE PASS LNG TERMINAL AGENCY INTEREST NO. 119267 SABINE PASS LNG, LP JOHNSONS BAYOU, CAMERON PARISH, LOUISIANA PSD-LA-703(M2)

#### **BEST AVAILABLE CONTROL TECHNOLOGY (BACT)**

PM, PM<sub>10</sub>, NO<sub>x</sub>, CO, and VOC emissions from the affected equipment are controlled by BACT as follows:

Submerged Combustion Vaporizers (SCVs): Re-circulated bath water for water injection to the burner flame, good combustion practices, and natural gas fired to maintain maximum NO<sub>x</sub> emissions to 30 ppmv @ 3% O<sub>2</sub> are determined as BACT for NO<sub>x</sub>. Good combustion practices to maintain maximum CO emissions to 80 ppmv @ 5% O<sub>2</sub> are determined as BACT for CO. Good combustion practices and the use of natural gas are determined as BACT for VOC, PM, and PM<sub>10</sub> emissions.

Turbines: The use of dry low NO<sub>x</sub> burner technology is determined as BACT for NO<sub>x</sub> emissions. NO<sub>x</sub> emissions rates are at 25 ppmv @ 15% O<sub>2</sub>, when operating at 75% or greater load; and at 50 ppmv @ 15% O<sub>2</sub>, when operating at less than 75% load. The use of good combustion practices is determined as BACT for CO emissions. CO emissions rates are at 50 ppmv @ 15% O<sub>2</sub>, when operating at 75% or greater load; and at 80 ppmv @ 15% O<sub>2</sub>, when operating at less than 75% load. Good combustion practices and the use of natural gas are determined as BACT for VOC and PM/PM<sub>10</sub> emissions.

Diesel Firewater Pumps, Diesel Firewater Booster Pump Engines: Good engine design and proper operating practices are determined as BACT for NO<sub>x</sub> and CO emissions. Good combustion practices, good engine design, and the use of low sulfur diesel are determined as BACT for VOC and PM/PM<sub>10</sub> emissions.

Emergency Generators: Complying with requirements of 40 CFR 60 Subpart IIII is determined as BACT for NO<sub>x</sub>, CO, VOC, and PM/PM<sub>10</sub> emissions.

Fugitives: Complying with requirements of LAC 33:III.2111 is determined as BACT for VOC emissions.

#### **AIR QUALITY IMPACT ANALYSIS**

Prevention of Significant Deterioration (PSD) regulations require an analysis of existing air quality for those pollutants emitted in significant amounts from a proposed facility. NO<sub>x</sub>, CO, and PM<sub>10</sub> were the pollutants of interest for this facility. VOC emissions are below 100 tons per year; therefore, modeling was not required.

Screening dispersion modeling indicated maximum ground level concentrations of CO were below the preconstruction monitoring exemption level and ambient significance levels. PSD increment analysis and refined modeling were not required.

Screening dispersion modeling indicated that the maximum ground level concentrations of PM<sub>10</sub> and NO<sub>x</sub> were below their respective preconstruction monitoring levels but above their respective ambient significance levels; as a result, refined modeling was required. The refined

**BRIEFING SHEET**

**SABINE PASS LNG TERMINAL  
AGENCY INTEREST NO. 119267  
SABINE PASS LNG, LP  
JOHNSONS BAYOU, CAMERON PARISH, LOUISIANA  
PSD-LA-703(M2)**

modeling determined that  $PM_{10}$  and  $NO_x$  concentrations were compliant with the NAAQS and PSD increment consumption standards.

**ADDITIONAL IMPACTS**

Soils, vegetation, and visibility will not be adversely impacted by the proposed facility, nor will any Class I area be affected. The project will not result in any significant secondary growth effects.

**PROCESSING TIME**

Application Dated:	May 10, 2008
Effective Completeness:	January 15, 2009

**PUBLIC NOTICE**

A notice requesting public comment on the proposed permit was published in *The Advocate*, Baton Rouge, LA and in the XXXX, LA on XXX. The notice was also mailed to individuals and organizations on the mailing list of the facility and published in the Office of Environmental Services Public Notice Mailing List. The permit application, the proposed permit, and the Statement of Basis were submitted to the Calcasieu Parish Library on XXX. The proposed permit and the Statement of Basis were submitted to United States Environmental Protection Agency (US EPA) Region 6. All comments will be considered prior to a permit decision.

## PRELIMINARY DETERMINATION SUMMARY

### SABINE PASS LNG TERMINAL AGENCY INTEREST NO.: 119267 SABINE PASS LNG, LP JOHNSONS BAYOU, CAMERON PARISH, LOUISIANA PSD-LA-703(M2), JANUARY 15, 2009

#### I. APPLICANT

Sabine Pass LNG, LP  
700 Milam Street, Suite 500  
Houston, TX 77002

#### II. LOCATION

Sabine Pass LNG LP - Sabine Pass LNG Import Terminal is located at 9243 Gulf Beach Road, Johnsons Bayou, Louisiana. Approximate UTM coordinates are 451.26 kilometers East, 3,258.34 kilometers North, zone 15.

#### III. PROJECT DESCRIPTION

The Sabine Pass LNG Terminal imports, stores, and vaporizes liquefied natural gas (LNG) for the U.S. natural gas markets. The facility is able to vaporize four billion standard cubic feet per day of LNG.

Sabine Pass LNG, LP requests a permit modification to 1) remove two permitted but never constructed standby diesel-fired firewater pump booster engines, 2) incorporate BACT for NO<sub>x</sub> and CO emissions from the turbines at low load operations and for VOC fugitive emissions, and 3) change the facility name from Sabine Pass LNG Import Terminal to Sabine Pass LNG Terminal. There are no proposed physical changes at the terminal. Permitted emissions in tons per year are as follows:

Pollutant	Permitted	Proposed	Change
PM	51.87	51.79	- 0.08
PM <sub>10</sub>	51.87	51.79	- 0.08
SO <sub>2</sub>	5.45	5.40	- 0.05
NO <sub>x</sub>	924.70	922.91	- 1.79
CO	1057.14	1057.04	- 0.10
VOC	58.22	58.70	+ 0.48

#### IV. SOURCE IMPACT ANALYSIS

A proposed net increase in the emission rate of a regulated pollutant above de minimis levels for new major stationary sources requires review under Prevention of Significant Deterioration regulations, LAC 33:III.509. PSD review entails the following analyses:

- A. A determination of the Best Available Control Technology (BACT);
- B. An analysis of the existing air quality and a determination of whether or not preconstruction or postconstruction monitoring will be required;
- C. An analysis of the source's impact on total air quality to ensure compliance with the National Ambient Air Quality Standards (NAAQS);



## PRELIMINARY DETERMINATION SUMMARY

### SABINE PASS LNG TERMINAL AGENCY INTEREST NO.: 119267 SABINE PASS LNG, LP JOHNSONS BAYOU, CAMERON PARISH, LOUISIANA PSD-LA-703(M2), JANUARY 15, 2009

- D. An analysis of the PSD increment consumption;
- E. An analysis of the source related growth impacts;
- F. An analysis of source related growth impacts on soils, vegetation, and visibility;
- G. A Class I Area impact analysis; and
- H. Toxic impacts

#### A. BEST AVAILABLE CONTROL TECHNOLOGY

Under current PSD regulations, an analysis of "top down" BACT is required for the control of each regulated pollutant emitted from a new major source in excess of the specified significant emission rates. The top down approach to the BACT process involves determining the most stringent control technique available for a similar or identical source. If it can be shown that this level of control is infeasible based on technical, environmental, energy, and/or cost considerations, then it is rejected and the next most stringent level of control is determined and similarly evaluated. This process continues until a control level is arrived at which cannot be eliminated for any technical, environmental, or economic reason. A technically feasible control strategy is one that has been demonstrated to function efficiently on identical or similar processes.

Because this permit modification does not authorize any physical modification or allow any emission increases, the BACT determination for equipment documented in Permit PSD-LA-703 and PSD-LA-703(M1) is not required to be revised.

The turbines are designed and optimized for operations at full loads, additional control is not required for operations at reduce loads. Maintain maximum NO<sub>x</sub> emissions at 50 ppmv @ 15% O<sub>2</sub> for operation at less than 50% load and CO at 80 ppmv @ 15% O<sub>2</sub> for operation at less than 75% load is determined as BACT.

The current BACT for the diesel generator engines is good engine design and proper operating practices. However, the engines are subject to 40 CFR 60 Subpart IIII which specifies standards for PM/PM<sub>10</sub>, NO<sub>x</sub>, CO and VOC emissions. Therefore, complying with 40 CFR 60 Subpart IIII is determined as BACT for PM/PM<sub>10</sub>, NO<sub>x</sub>, CO and VOC emissions from the diesel generator engines.

A small quantity of VOC (2.18 tons/year) is emitted from the facility as fugitives, which is subject to LAC 33:III.2111. Because the potential control benefit is small, additional control is not practical. Complying with LAC 33:III.2111 is determined as BACT for fugitive VOC emissions.

## **PRELIMINARY DETERMINATION SUMMARY**

**SABINE PASS LNG TERMINAL  
AGENCY INTEREST NO.: 119267  
SABINE PASS LNG, LP  
JOHNSONS BAYOU, CAMERON PARISH, LOUISIANA  
PSD-LA-703(M2), JANUARY 15, 2009**

### **B. ANALYSIS OF EXISTING AIR QUALITY**

Because this permit modification does not authorize any physical modification or allow any emission increases, an analysis of existing air quality is not required. The summary of the analysis of existing air quality is shown in Table II.

### **C. NATIONAL AMBIENT AIR QUALITY STANDARDS (NAAQS) ANALYSIS**

Because this permit modification does not authorize any physical modification or allow any emission increases, an NAAQS analysis is not required.

### **D. PSD INCREMENT ANALYSIS**

Because this permit modification does not authorize any physical modification or allow any emission increases, a PSD increment analysis is not required.

### **E. SOURCE RELATED GROWTH IMPACTS**

Secondary growth effects are minimal. The project will not create any permanent jobs.

### **F. SOILS, VEGETATION, AND VISIBILITY IMPACTS**

There will be no significant impact on soils, vegetation, and visibility.

### **G. CLASS I AREA IMPACTS**

Breton National Wildlife Area, the nearest Class I area, is more than 100 miles from the site, precluding any significant impact.

### **H. TOXIC IMPACT**

The facility is a minor source of toxic air pollutants (TAPs) and hazardous air pollutant (HAPs). The selection of control technology based on the BACT analysis included consideration of control of toxic emissions.

## **V. CONCLUSION**

The Louisiana Department of Environmental Quality, Office of Environmental Services, has made a preliminary determination to approve the PSD permit (PSD-LA-703(M2)) for the Sabine Pass LNG LP's Sabine Pass LNG Terminal near Johnsons Bayou, in Cameron Parish, Louisiana, subject to the attached specific and general conditions. In the event of a discrepancy in the provisions found in the application and those in this Preliminary Determination Summary, the Preliminary Determination Summary shall prevail.

**SPECIFIC CONDITIONS**

**SABINE PASS LNG TERMINAL  
AGENCY INTEREST NO.: 119267**

**SABINE PASS LNG, LP  
JOHNSONS BAYOU, CAMERON PARISH, LOUISIANA  
PSD-LA-703(M2)**

1. The permittee is authorized to operate in conformity with the specifications submitted to the Louisiana Department of Environmental Quality (LDEQ) as analyzed in LDEQ's document entitled "Preliminary Determination Summary" dated January 15, 2009 and subject to the BACT determinations listed in Table III, and emission limitations listed in Table IV. Specifications submitted are contained in the application dated May 10, 2008.

**LOUISIANA AIR EMISSION PERMIT  
GENERAL CONDITIONS**

- I. This permit is issued on the basis of the emissions reported in the application for approval of emissions and in no way guarantees that the design scheme presented will be capable of controlling the emissions to the type and quantities stated. Failure to install, properly operate and/or maintain all proposed control measures and/or equipment as specified in the application and supplemental information shall be considered a violation of the permit and LAC 33:III.501. If the emissions are determined to be greater than those allowed by the permit (e.g. during the shakedown period for new or modified equipment) or if proposed control measures and/or equipment are not installed or do not perform according to design efficiency, an application to modify the permit must be submitted. All terms and conditions of this permit shall remain in effect unless and until revised by the permitting authority.
- II. The permittee is subject to all applicable provisions of the Louisiana Air Quality Regulations. Violation of the terms and conditions of the permit constitutes a violation of these regulations.
- III. The Emission Rates for Criteria Pollutants, Emission Rates for TAP/HAP & Other Pollutants, and Specific Requirements sections or, where included, Emission Inventory Questionnaire sheets establish the emission limitations and are a part of the permit. Any operating limitations are noted in the Specific Requirements or, where included, Tables 2 and 3 of the permit. The synopsis is based on the application dated May 10, 2008.
- IV. This permit shall become invalid, for the sources not constructed, if:
  - A. Construction is not commenced, or binding agreements or contractual obligations to undertake a program of construction of the project are not entered into, within two (2) years (18 months for PSD permits) after issuance of this permit, or;
  - B. If construction is discontinued for a period of two (2) years (18 months for PSD permits) or more.

The administrative authority may extend this time period upon a satisfactory showing that an extension is justified.

This provision does not apply to the time period between construction of the approved phases of a phased construction project. However, each phase must commence construction within two (2) years (18 months for PSD permits) of its projected and approved commencement date.
- V. The permittee shall submit semiannual reports of progress outlining the status of construction, noting any design changes, modifications or alterations in the construction schedule which have or may have an effect on the emission rates or ambient air quality levels. These reports shall continue to be submitted until such time as construction is certified as being complete. Furthermore, for any significant change in the design, prior approval shall be obtained from the Office of Environmental Services, Air Permits Division.
- VI. The permittee shall notify the Department of Environmental Quality, Office of Environmental Services, Air Permits Division within ten (10) calendar days from the date that construction is certified as complete and the estimated date of start-up of operation. The appropriate Regional Office shall also be so notified within the same time frame.

## LOUISIANA AIR EMISSION PERMIT GENERAL CONDITIONS

- VII. Any emissions testing performed for purposes of demonstrating compliance with the limitations set forth in paragraph III shall be conducted in accordance with the methods described in the Specific Conditions and, where included, Tables 1, 2, 3, 4, and 5 of this permit. Any deviation from or modification of the methods used for testing shall have prior approval from the Office of Environmental Assessment, Air Quality Assessment Division.
- VIII. The emission testing described in paragraph VII above, or established in the specific conditions of this permit, shall be conducted within sixty (60) days after achieving normal production rate or after the end of the shakedown period, but in no event later than 180 days after initial start-up (or restart-up after modification). The Office of Environmental Assessment, Air Quality Assessment Division shall be notified at least (30) days prior to testing and shall be given the opportunity to conduct a pretest meeting and observe the emission testing. The test results shall be submitted to the Air Quality Assessment Division within sixty (60) days after the complete testing. As required by LAC 33:III.913, the permittee shall provide necessary sampling ports in stacks or ducts and such other safe and proper sampling and testing facilities for proper determination of the emission limits.
- IX. The permittee shall, within 180 days after start-up and shakedown of each project or unit, report to the Office of Environmental Compliance, Enforcement Division any significant difference in operating emission rates as compared to those limitations specified in paragraph III. This report shall also include, but not be limited to, malfunctions and upsets. A permit modification shall be submitted, if necessary, as required in Condition I.
- X. The permittee shall retain records of all information resulting from monitoring activities and information indicating operating parameters as specified in the specific conditions of this permit for a minimum of at least five (5) years.
- XI. If for any reason the permittee does not comply with, or will not be able to comply with, the emission limitations specified in this permit, the permittee shall provide the Office of Environmental Compliance, Enforcement Division with a written report as specified below.
- A. A written report shall be submitted within 7 days of any emission in excess of permit requirements by an amount greater than the Reportable Quantity established for that pollutant in LAC 33.I.Chapter 39.
  - B. A written report shall be submitted within 7 days of the initial occurrence of any emission in excess of permit requirements, regardless of the amount, where such emission occurs over a period of seven days or longer.
  - C. A written report shall be submitted quarterly to address all emission limitation exceedances not included in paragraphs A or B above. The schedule for submittal of quarterly reports shall be no later than the dates specified below for any emission limitation exceedances occurring during the corresponding specified calendar quarter:
    - 1. Report by June 30 to cover January through March
    - 2. Report by September 30 to cover April through June
    - 3. Report by December 31 to cover July through September
    - 4. Report by March 31 to cover October through December

## LOUISIANA AIR EMISSION PERMIT GENERAL CONDITIONS

- D. Each report submitted in accordance with this condition shall contain the following information:
1. Description of noncomplying emission(s);
  2. Cause of noncompliance;
  3. Anticipated time the noncompliance is expected to continue, or if corrected, the duration of the period of noncompliance;
  4. Steps taken by the permittee to reduce and eliminate the noncomplying emissions; and
  5. Steps taken by the permittee to prevent recurrences of the noncomplying emissions.
- E. Any written report submitted in advance of the timeframes specified above, in accordance with an applicable regulation, may serve to meet the reporting requirements of this condition provided all information specified above is included. For Part 70 sources, reports submitted in accordance with Part 70 General Condition R shall serve to meet the requirements of this condition provided all specified information is included. Reporting under this condition does not relieve the permittee from the reporting requirements of any applicable regulation, including LAC 33.I.Chapter 39, LAC 33.III.Chapter 9, and LAC 33.III.5107.

XII. Permittee shall allow the authorized officers and employees of the Department of Environmental Quality, at all reasonable times and upon presentation of identification, to:

- A. Enter upon the permittee's premises where regulated facilities are located, regulated activities are conducted or where records required under this permit are kept;
- B. Have access to and copy any records that are required to be kept under the terms and conditions of this permit, the Louisiana Air Quality Regulations, or the Act;
- C. Inspect any facilities, equipment (including monitoring methods and an operation and maintenance inspection), or operations regulated under this permit; and
- D. Sample or monitor, for the purpose of assuring compliance with this permit or as otherwise authorized by the Act or regulations adopted thereunder, any substances or parameters at any location.

XIII. If samples are taken under Section XII.D. above, the officer or employee obtaining such samples shall give the owner, operator or agent in charge a receipt describing the sample obtained. If requested prior to leaving the premises, a portion of each sample equal in volume or weight to the portion retained shall be given to the owner, operator or agent in charge. If an analysis is made of such samples, a copy of the analysis shall be furnished promptly to the owner, operator or agency in charge.

XIV. The permittee shall allow authorized officers and employees of the Department of Environmental Quality, upon presentation of identification, to enter upon the permittee's premises to investigate potential or alleged violations of the Act or the rules and regulations adopted thereunder. In such investigations, the permittee shall be notified at the time entrance is requested of the nature of the suspected violation. Inspections under this subsection shall be limited to the aspects of alleged violations. However, this shall not in any way preclude prosecution of all violations found.

**LOUISIANA AIR EMISSION PERMIT  
GENERAL CONDITIONS**

- XV. The permittee shall comply with the reporting requirements specified under LAC 33:III.919 as well as notification requirements specified under LAC 33:III.927.
- XVI. In the event of any change in ownership of the source described in this permit, the permittee and the succeeding owner shall notify the Office of Environmental Services in accordance with LAC 33:I.Chapter 19.Facility Name and Ownership/Operator Changes Process.
- XVII. Very small emissions to the air resulting from routine operations, that are predictable, expected, periodic, and quantifiable and that are submitted by the permitted facility and approved by the Air Permits Division are considered authorized discharges. Approved activities are noted in the General Condition XVII Activities List of this permit. To be approved as an authorized discharge, these very small releases must:
1. Generally be less than 5 TPY
  2. Be less than the minimum emission rate (MER)
  3. Be scheduled daily, weekly, monthly, etc., or
  4. Be necessary prior to plant startup or after shutdown [line or compressor pressuring/depressuring for example]
- These releases are not included in the permit totals because they are small and will have an insignificant impact on air quality. This general condition does not authorize the maintenance of a nuisance, or a danger to public health and safety. The permitted facility must comply with all applicable requirements, including release reporting under LAC 33:I.3901.
- XVIII. Provisions of this permit may be appealed in writing pursuant to La. R.S. 30:2024(A) within 30 days from receipt of the permit. Only those provisions specifically appealed will be suspended by a request for hearing, unless the secretary or the assistant secretary elects to suspend other provisions as well. Construction cannot proceed except as specifically approved by the secretary or assistant secretary. A request for hearing must be sent to the following:
- Attention: Office of the Secretary, Legal Services Division  
La. Dept. of Environmental Quality  
Post Office Box 4302  
Baton Rouge, Louisiana 70821-4302
- XIX. For Part 70 sources, certain Part 70 general conditions may duplicate or conflict with state general conditions. To the extent that any Part 70 conditions conflict with state general conditions, then the Part 70 general conditions control. To the extent that any Part 70 general conditions duplicate any state general conditions, then such state and Part 70 provisions will be enforced as if there is only one condition rather than two conditions.

**SABINE PASS LNG TERMINAL**  
**AGENCY INTEREST NO.: 119267**  
**SABINE PASS LNG, LP**  
**JOHNSONS BAYOU, CAMERON PARISH, LOUISIANA**  
**PSD-LA-703(M2)**

**TABLE I: BACT COST SUMMARY**

Control Alternatives For Turbines	Availability/ Feasibility	Negative Impacts (a)	Control Efficiency (%)	Emissions Reduction (TPV)	Capital Cost (\$)	Annualized Cost (\$/yr)	Cost Effectiveness (\$/ton)	Notes
NOX	No/No							
SCR	Yes/No	1,2	80%	45.5	1,328,000	576,000	12,700	
NSCR	No/No							
DLNB	Yes/Yes							
<b>Notes:</b> a) Negative impacts: 1) economic, 2) environmental, 3) energy, 4) safety								



**SABINE PASS LNG TERMINAL**  
**AGENCY INTEREST NO.: 119267**  
**SABINE PASS LNG, LP**  
**JOHNSONS BAYOU, CAMERON PARISH, LOUISIANA**  
**PSD-LA-703(M2)**

**TABLE II: AIR QUALITY ANALYSIS SUMMARY ( $\mu\text{g}/\text{m}^3$ )**

Pollutant	Averaging Period	Preliminary Screening	Significant Monitoring	Level of Significant Impact	At Monitoring Station		Background	Maximum Modeled	Modeled + Background	NAAQS	Modeled PSD Increment Consumption	Allowable Class II PSD Increment
					Monitored Values	Modeling Results						
PM <sub>10</sub>	24-hour	5.15	10	5			68.0	56.9	124.9	150	5.40	30
NO <sub>2</sub>	Annual	13.10	14	1			9.59	25.95	35.54	100	13.77	25
CO	1-hour	1294		2000				NR		40,000	NR	
	8-hour	474	575	500				NR		10,000	NR	
NAAQS = National Ambient Air Quality Standards												
NR = Not Required												

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**TABLE III. BACT SELECTION**

<b>Emission Point</b>	<b>PM/PM<sub>10</sub></b>	<b>NO<sub>x</sub></b>	<b>CO</b>	<b>VOC</b>
Submerged Combustion Vaporizers	Good combustion practices and the use of natural gas	30 ppmv @ 3% O <sub>2</sub> Re-circulated bath water for water injection Good combustion practices, and natural gas fired	80 ppmv @ 5% O <sub>2</sub> Good combustion practices	Good combustion practices and the use of natural gas
Turbines	Good combustion practices and the use of natural gas	dry low NO <sub>x</sub> burner 25 ppmv @ 15% O <sub>2</sub> @ load => 50% 50 ppmv @ 15% O <sub>2</sub> @ load < 50%	Good combustion practices 50 ppmv @ 15% O <sub>2</sub> @ load => 75% 80 ppmv @ 15% O <sub>2</sub> @ load < 75%	Good combustion practices and the use of natural gas
Firewater Engines	Good combustion practices, good engine design, and the use of low sulfur diesel	Good engine design and proper operating practices	Good engine design and proper operating practices	Good combustion practices, good engine design, and the use of low sulfur diesel
Diesel Generator Engines	40 CFR 60 Subpart IIII	40 CFR 60 Subpart IIII	40 CFR 60 Subpart IIII	40 CFR 60 Subpart IIII
Fugitives				LAC 33:III.2111

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**TABLE IV - MAXIMUM ALLOWABLE EMISSION RATES**

EQT	Description	PM/PM <sub>10</sub>		NO <sub>x</sub>		CO		VOC	
		lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr
EQT0003	GT1 – Natural Gas-Fired Generator Turbine No. 1	2.11	8.50	29.00	118.79	17.80	71.61	1.20	4.84
EQT0004	GT2 – Natural Gas-Fired Generator Turbine No. 2	2.11	8.50	29.00	118.79	17.80	71.61	1.20	4.84
EQT0005	GT3 – Natural Gas-Fired Generator Turbine No. 3	2.11	8.50	29.00	118.79	17.80	71.61	1.20	4.84
EQT0006	GT4 – Natural Gas-Fired Generator Turbine No. 4	2.11	8.50	29.00	118.79	17.80	71.61	1.20	4.84
EQT0008	SCV10 – Submerged Combustion Vaporizer No. 10	0.15	0.66	4.50	17.50	9.47	31.22	0.32	1.42
EQT0009	SCV11 – Submerged Combustion Vaporizer No. 11	0.15	0.66	4.50	17.50	9.47	31.22	0.32	1.42
EQT0010	SCV12 – Submerged Combustion Vaporizer No. 12	0.15	0.66	4.50	17.50	9.47	31.22	0.32	1.42
EQT0011	SCV13 – Submerged Combustion Vaporizer No. 13	0.15	0.66	4.50	17.50	9.47	31.22	0.32	1.42
EQT0012	SCV14 – Submerged Combustion Vaporizer No. 14	0.15	0.66	4.50	17.50	9.47	31.22	0.32	1.42
EQT0013	SCV15 – Submerged Combustion Vaporizer No. 15	0.15	0.66	4.50	17.50	9.47	31.22	0.32	1.42
EQT0014	SCV16 – Submerged Combustion Vaporizer No. 16	0.15	0.66	4.50	17.50	9.47	31.22	0.32	1.42
EQT0015	SCV1 – Submerged Combustion Vaporizer No. 1	0.15	0.66	4.50	17.50	9.47	31.22	0.32	1.42
EQT0016	SCV2 – Submerged Combustion Vaporizer No. 2	0.15	0.66	4.50	17.50	9.47	31.22	0.32	1.42
EQT0017	SCV3 – Submerged Combustion Vaporizer No. 3	0.15	0.66	4.50	17.50	9.47	31.22	0.32	1.42
EQT0018	SCV4 – Submerged Combustion Vaporizer No. 4	0.15	0.66	4.50	17.50	9.47	31.22	0.32	1.42
EQT0019	SCV5 – Submerged Combustion Vaporizer No. 5	0.15	0.66	4.50	17.50	9.47	31.22	0.32	1.42
EQT0020	SCV6 – Submerged Combustion Vaporizer No. 6	0.15	0.66	4.50	17.50	9.47	31.22	0.32	1.42
EQT0021	SCV7 – Submerged Combustion Vaporizer No. 7	0.15	0.66	4.50	17.50	9.47	31.22	0.32	1.42
EQT0022	SCV8 – Submerged Combustion Vaporizer No. 8	0.15	0.66	4.50	17.50	9.47	31.22	0.32	1.42
EQT0023	SCV9 – Submerged Combustion Vaporizer No. 9	0.15	0.66	4.50	17.50	9.47	31.22	0.32	1.42
EQT0024	FWP1 – Firewater Pump Diesel Engine No. 1	1.24	0.31	12.19	3.05	0.55	0.14	0.07	0.02
EQT0025	FWP2 – Firewater Pump Diesel Engine No. 2	1.24	0.31	12.19	3.05	0.55	0.14	0.07	0.02
EQT0026	FWP3 – Firewater Pump Diesel Engine No. 3	1.24	0.31	12.19	3.05	0.55	0.14	0.07	0.02

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**TABLE IV - MAXIMUM ALLOWABLE EMISSION RATES**

EQT	Description	PM/PM <sub>10</sub>		NO <sub>x</sub>		CO		VOC	
		lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr
EQT0027	FWP81 – Firewater Booster Pump Diesel Engine No. 1	0.06	0.02	3.44	0.86	0.18	0.05	0.10	0.03
EQT0028	FWP82 – Firewater Booster Pump Diesel Engine No. 2	0.06	0.02	3.44	0.86	0.18	0.05	0.10	0.03
EQT0031	GEN1 – Standby Generator Diesel Engine No. 1	1.96	0.49	33.77	8.44	41.60	10.40	4.89	1.22
EQT0032	GEN2 – Standby Generator Diesel Engine No. 2	1.96	0.49	33.77	8.44	41.60	10.40	4.89	1.22
EQT0033	SCV17 – Submerged Combustion Vaporizer No. 17	0.15	0.66	4.50	17.50	9.47	31.22	0.32	1.42
EQT0034	SCV18 – Submerged Combustion Vaporizer No. 18	0.15	0.66	4.50	17.50	9.47	31.22	0.32	1.42
EQT0035	SCV19 – Submerged Combustion Vaporizer No. 19	0.15	0.66	4.50	17.50	9.47	31.22	0.32	1.42
EQT0036	SCV20 – Submerged Combustion Vaporizer No. 20	0.15	0.66	4.50	17.50	9.47	31.22	0.32	1.42
EQT0037	SCV21 – Submerged Combustion Vaporizer No. 21	0.15	0.66	4.50	17.50	9.47	31.22	0.32	1.42
EQT0038	SCV22 – Submerged Combustion Vaporizer No. 22	0.15	0.66	4.50	17.50	9.47	31.22	0.32	1.42
EQT0039	SCV23 – Submerged Combustion Vaporizer No. 23	0.15	0.66	4.50	17.50	9.47	31.22	0.32	1.42
EQT0040	SCV24 – Submerged Combustion Vaporizer No. 24	0.15	0.66	4.50	17.50	9.47	31.22	0.32	1.42
FUG0002	FUG1 – Fugitive Emissions							0.25	1.09
FUG0003	FUG2 – Fugitive Emissions (528 AAVs)							0.25	1.09